EX PARTE OR LATE FILED

Building The Wireless Future...

June 22, 1995

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Randall S. Coleman
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Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

Re: *Ex Parte* Presentation
CC Docket No. 92-237
IAD File Nos. 94-102, 94-104

Dear Mr. Caton:

On Friday, June 16, 1995, the Cellular Telecommunications Industry Association ("CTIA") represented by Mr. Randall Coleman, Vice President of Regulatory Policy and Law, and Mr. Michael Altschul, Vice President and General Counsel, met with Mr. Rudolfo Bacca, Legal Advisor to Commissioner James Quello, to discuss numbering issues, particularly CTIA's proposal for a U.S. Numbering Association.

At the meeting, CTIA presented the attached documents. Pursuant to Section 1.1206 of the Commission's Rules, an original and one copy of this letter and the attachments are being filed with your office. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,

Randall S. Coleman

Attachments

No. of Copies rec'd 0+2
List ABCDE

CTIA  Building The Wireless Future

The Administration of U.S. Numbering Resources

CC Docket No. 92-237
IAD File No. 94-102
IAD File No. 94-104

***Ex Parte* Presentation**
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Number Exhaustion Is A Reality for American Consumers

- 80,000 new telephone numbers are assigned daily. Two-thirds of the new telephone numbers go to subscribers of wireless services. As new wireless services, *i.e.*, PCS and ESMR, are deployed, this number will increase dramatically.

- In this year alone, as many as 14 area codes are scheduled to change in North America, including Bermuda and Canada. While new codes have already been assigned in Alabama, Arizona, Colorado, Florida, Georgia, Illinois, Texas, Virginia and Washington, two more codes are being contemplated for use in California and Florida.

- New area codes, which are applied as "overlays" or "geographic splits," are forcing customers to change their dialing habits and to incur significant costs, *i.e.*, changing stationary, business cards, etc., to reflect new telephone number.

- Several "overlay" and "geographic split" plans propose discriminatory assignment of numbers, *i.e.*, requiring wireless customers to surrender their assigned telephone numbers for use by wireline telephone customers, and accept new telephone numbers.

- The rapid and fair distribution of numbering resources is critical to responding to consumer demands for wireless technology.

FCC's Jurisdiction Over Numbering Resources

- **The FCC has suggested that it does not have plenary jurisdiction over the administration of scarce numbering resources.[1] CTIA, however, has strongly urged the FCC to clarify that while states have an important role in numbering administration, the FCC must retain plenary jurisdiction over the administration of scarce numbering resources.**

- **In its Reply Comments to Comcast Corporation's Petition for Clarification or Reconsideration, CTIA states:**

> Just as the Commission's rejection of its plenary jurisdiction over numbering needlessly restricts its authority to address anticompetitive state actions that result in the discriminatory assignment of numbering resources, the Commission also will not be able to reach assignments promulgated by a truly independent administrator not associated with any carrier or industry segment. It is most ironic that the Commission tentatively has concluded that it has sufficient plenary authority over numbering resources to assign NANP administrative functions to a "single, non-government entity established by this Commission and ... not closely identified with any particular industry segment,"[2] but on its own initiative, it has limited its jurisdiction to just its Title II authority over carriers. As a result, the FCC appears to have concluded that while it has sufficient authority to assign the NANP administrative functions to a non-carrier body, it lacks the regulatory jurisdiction required to oversee such an independent entity's activities.

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1 *In the Matter of Proposed 708 Relief Plan and 630 Numbering Plan Area Code, Declaratory Ruling and Order,* IAD File No. 94-102, FCC 95-19, (released January 23, 1995).

2 *In the Matter of Administration of the North American Numbering Plan, Notice of Proposed Rule Making,* 9 FCC Rcd 2068 at ¶ 18 (1994).

The Solution: A New Administrator of the North American Numbering Plan

- The administration of the North American Numbering Plan and the assignment of new numbering resources are of great competitive importance to all segments of the telecommunications industry.

- Since numbering resources are scarce, whoever administers them will have to deny some requests. Therefore, it is crucial that the administrator not only be unbiased, but also have no appearance of bias.

- Responsibility for the administration and assignment of numbering resources should be promptly placed in the hands of a new independent entity with a neutral governing board open to all carriers.

- Responsibility for determining the form of numbering relief should be placed in the hands of the new numbering authority, which will provide the affected parties an opportunity to develop of the most appropriate plan consistent with local needs and the federal principles and guidelines for numbering assignment.

- CTIA proposes the creation of a U.S. Numbering Association, a consensus-guided authority, to manage the North American Numbering Plan. The U.S. Numbering Association would consist of a neutral governing board for which all carriers will be eligible. It will consider the views and the specific circumstances of the affected parties and will be guided by the federal principles and guidelines for numbering assignment.

Local Number Portability in a Wireless Environment

- **Local number portability is not as important to competition in a wireless environment as it is in the landline network.**

  - The industry's provision of roaming services already provides a form of portability
  - The industry's commitment to 500 number portability

- **The current wireless infrastructure cannot technically support local number portability.**

  IS-41 management between the Home Location Register (HLR) and Visitor Location Register (VLR) technology cannot support number portability. The database structure and memory utilization is not such that individual numbers can be "ported."

- **Wireless local number portability and nationwide roaming are mutually exclusive today.**

  Due to the way that the nationwide SS7 network is configured, a wireless customer who "ported" his number to a competitor would lose his ability to use his phone outside of his home switch.

  To overcome this limitation, a separate nationwide database would have to be established. A large nationwide database containing <u>all</u> local numbers would be an impractical solution to local number portability.

  In addition, important industry consensus and standards issues must be addressed before such a nationwide database can be established. Wireless and LEC portability must be coordinated.

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Cellular Telecommunications Industry Association

Draft Proposal: Creation of the U.S. Numbering Association

CC Docket No. 92-237
IAD File No. 94-102
IAD File No. 94-104

***Ex Parte* Presentation**
June 22, 1995

PROPOSAL FOR CREATING THE U.S. NUMBERING ASSOCIATION

The FCC should immediately create the United States Numbering Association (USNA) to administer the U.S. numbering resources of World Zone One.[1] The following areas highlight the overall plan for establishing the USNA.

1. Location

The USNA would be based in Washington, DC to enhance its working relationship with the FCC and the various associations representing the telecommunications industries.

2. Representation

Due to Canadian and Caribbean sovereignty issues,[2] the USNA should only administer the resources of U.S. carriers. The USNA would coordinate assignments with their counterparts in other Zone One nations.

A Board of Directors would be established, inviting a minimal complement of representatives from each telecommunications industry segment that utilizes numbering resources. This would encompass Wireless Service Providers (WSPs), Local Exchange Carriers (LECs), Interexchange Carriers (IXCs), Competitive Access Providers (CAPs), and others (*e.g.* cable, payphone, satellite industries). Board member selection would be facilitated by the FCC working directly with the key associations representing the specific industry segments. A cap on representation would be established, to prevent an oversized Board. Members of the FCC could act in an advisory capacity during the formation and initial meetings of the Board. Once the USNA were fully operational, FCC interaction would be minimal.

3. Staffing and Office Requirements

Presently, five staff members perform the NANPA functions. Each RBOC also provides staff to assign NXXs at the regional level. Considering efficiencies gained by putting all assignments into one office, it is estimated a ten-person staff could handle the assignments. An Executive Director would lead the effort. Additional research is needed to determine the specific staff responsibilities and compensation levels, and project staff growth.

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[1] World Zone One is composed of Bermuda, Canada, the United States and the Caribbean islands in the 809 NPA (*i.e.*, Anguilla, Antigua, Bahamas, Barbuda, Barbados, British Virgin Islands, Carriacou, Cayman Islands, Dominica, Dominican Republic, Grenada, Jamaica, Monserrat, Nevis, Puerto Rico, St. Kitts, St. Lucia, St. Vincent and the Granadines, Trinidad and Tobago, Turks and Caicos Islands, and the U.S. Virgin Islands).

[2] The Canadian government has established an elaborate, though often criticized process for administering their numbering resources. The CRTC, Industry Canada, and the Canadian Numbering Administrator work together and with telecommunications service providers on numbering issues. It would be best if the Canadian, U.S., and other countries would work together in international numbering strategies in lieu of the U.S. attempting to assume and/or assert control over another country's domain.

All numbering assignments would be done through computerized databases, based on uniform assignment criteria adopted by the Board of Directors.[3]

Staffing requirements would take into account travel expectations to participate in national (INC) and international (ITU) numbering forums.

4. Funding

Funding for the USNA would be provided by the users of the numbering resources: WSPs, LECs, IXCs, CAPs, and others. With additional research, a budget would be developed to account for projected staffing, overhead, expenses, and revenue. Initial funding would be provided through assessments to carriers, based on their numbering resources in use. Regular funding for operating revenue would be derived from assignment fees.

A. Initial funding for development and creation of the USNA would be provided by the current numbering resource users and would be based on the formula below.[4] Since the majority of work to be performed would be administering NPA and NXX codes, initial funding of the USNA would be based on the number of NXXs currently in use.[5] For smaller carriers that share an NXX, the formula could be adjusted.

Initial Carrier Funding of the USNA

USNA Budget	÷	Total Number of All Carrier's NXXs	X	Funding Carrier Number of NXXs

B. Regular funding of the USNA would be based upon a rate structure to be developed, and based upon a fee per number assignment. NPA and NXX code assignment fees would be the primary income for USNA. A complete fee schedule would be developed for all assignments (see list below).

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[3] Two groups under the LEC-governed Alliance for Telecommunications Industry Solutions (ATIS) have developed numbering proposals. The Industry Numbering Committee (INC) has developed NPA Relief Planning Guidelines, and the Industry Carriers Compatibility Forum has developed NXX Assignment Guidelines. Pending review, these documents could be useful in developing USNA guidelines. ATIS' governance remains LEC controlled, despite requests from CTIA to broaden its scope. WSPs have participated in drafting the current numbering guideline documents.

[4] This initial carrier funding mechanism is similar to the CTIA funding mechanism for Fraud Assessments and Health & Safety Assessments, based on member spectrum and pops.

[5] For a simpler initial funding alternative, each USNA Board member company, or the association they represent, would pay a flat fee for the privilege of sitting on the Board.

5. Numbering Assignments

The USNA's primary responsibility would be assigning NPA and NXX codes. These, and other numbering resources for which a fee would be charged include:

a) NPA (area) codes:
   - for the United States, Canadian provinces, and other locations,
   - N00 codes (*e.g.* 500, 800, 900 area codes), and

b) NXX (central office) codes
   - in the 809 NPA, for Caribbean nations,
   - in the 456 NPA for routing of inbound international calls,
   - in the U.S.[6] and Canada, and

c) Carrier ID Codes (*e.g.* 10-XXX codes); and

d) SS7 network codes

Other numbering assignments are currently performed by other entities representing telecommunications service providers, as noted below. Further research is necessary to determine the need and feasibility of putting their assignment under the USNA.

Numbering Assignment	Responsible Entity	Length	Purpose
System Identification (SID)	FCC	5	Identify market-level licensed wireless service providers.
ESN Manufacturer Prefixes	FCC	3	First 3 digits of an 11-digit ESN, which identifies the mobile unit manufacturer.
Billing Identification (BID)	CIBERNET Corporation	5	Identifies the wireless service provider responsible for billings to a particular NXX. The BID is often a SID subset.
Carrier Identification Number	CIBERNET Corporation	3	Identify wireless service provider companies.
Non-dialable numbers	none - WSPs arbitrarily assign #s to themselves. CIBERNET tracks usage.	3	Unique area codes, outside the range of NANP, used by wireless carriers to identify mobile units of unique application, specific to their geographic markets *e.g.* UPS courier tablets.
Operating Company Code (OCN)	National Exchange Carriers Association (NECA)	3	Identify mainly LECs & IXCs for message routing and rating purposes. WSPs have started using OCNs for message processing with LECs.
Revenue Accounting Office (RAO)	Bellcore	3	Used by LECs & IXCs to identify themselves as the recipient of billings. Similar to SID or BID.

Because some of the numbers above are industry segment-specific (*i.e.* CIBERNET BIDs, and Bellcore RAOs), it would be ideal for the responsible entity to continue as the assignor. In the future however, as technologies converge, traditional industry segmentation will blur.

[6] RBOCs presently assign NXXs to service providers in their territories. The USNA would take over this responsibility.

Wireless and landline service providers will likely be exchanging call record and billing information more frequently. This will necessitate a more uniform assignment of the various numbering codes to facilitate intercarrier routing and exchange of messages.

Summary

Multiple telecommunications industry segments now benefit from numbering assignments. The methods and entity currently employed to administer numbering resources are outdated and require immediate change.

The FCC should immediately establish the U.S. Numbering Association (USNA) to administer the numbering resources of World Zone One. The USNA would be a Washington, DC-based staff of approximately ten persons, overseen by a Board of Directors comprised of representatives from all telecommunications service providers. The USNA would be funded by assignment fees for numbering resources which telecommunications service providers require.